

Applicant : Hugues Malandain
Serial No. : 10/826,684
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Attorney's Docket No.: 17116-004001

Amendments to the Drawings:

The attached replacement sheets of drawings include changes to Figs. 1-4C and replace the original sheets including Figs. 1-4C.

In Figures 1-4C, non-numerical labels have been removed.

Attachments following last page of this Amendment:

Replacement Sheets (7 pages)
Annotated Sheets Showing Changes (8 pages)

REMARKS

Claims 1-44 are pending. Claims 1-2, 38, and 43-44 are amended for clarity. Support for the amendments can be found at least at page 8, lines 1-5 and FIG. 1 of the specification. Reconsideration of the action mailed January 19, 2007, is respectfully requested in light of the foregoing amendments and the following remarks.

Drawing Objection

The Examiner objected to the drawings as including non-numeric labels and for lines being non-uniform. Corrected drawings are enclosed.

Claim Objections

The Examiner objected to claims 19-20, 29, 32, and 37 as reciting features that do not appear in the figures. Specifically, claims 19-20 recite features including that the first end and the second end of the receiver are either both open or both closed and claims 29 and 37 recite features including a cam disposed within the locker aperture.

Under 35 U.S.C. § 113 provides that drawings are only required "where necessary for the understanding of the subject matter sought to be patented." Additionally, under MPEP 608.02(d), conventional features disclosed in the specification need not be specifically illustrated. FIGS. 1 and 2A-2D show a receiver having a first end that is open and a second end that is closed. From these figures it is clearly evident how a receiver having both ends open or both ends closed would be configured. As such, Applicant respectfully asserts that an additional drawings showing each configuration is unnecessary to understand the claimed subject matter.

Similarly, claims 29 and 37 recite a cam within the locking mechanism. FIGS. 4A-4C include example locking mechanisms having a setscrew or screw. Additionally, the specification states that the shown setscrew or screw can be replaced in each instance with a cam. The structure and function of cams are well known. As such, Applicant respectfully asserts that the separate illustration of a cam replacing the illustrated setscrew is unnecessary to understand the claimed subject matter.

Finally, claim 32 recites that the screw is a bone screw. The figures (*e.g.*, FIGS. 1 and 3) show a screw that is consistent with various types of screws including bone screws. Thus, the figures do show the claimed feature.

Applicant respectfully requests that the objection to claims 19-20, 29, 32, and 37 be withdrawn.

Double Patenting

The Examiner provisionally rejected claims 1, 3-6, 10-12, 14-15, 28, 31, 34-35, and 37-39 under nonstatutory obviousness-type double patenting as allegedly unpatentable over claims 4-9, 11-12, 14-16, and 18 of U.S. Patent Application No. 11/019,918 ("Malandain").

The Examiner provisionally rejected claims 8-9, and 26-27 under nonstatutory obviousness-type double patenting as allegedly unpatentable over claim 1 of Malandain.

Applicant respectfully disagrees. Claims 1, 3-6, 10-12, 14-15, 28, 31, 34-35, and 37-39 include features not found in claims 4-9, 11-12, 14-16, and 18 of Malandain. However, in order to expedite prosecution, a Terminal Disclaimer with respect to Malandain is being filed herewith.

The Examiner provisionally rejected claim 43 under 35 U.S.C. § 101 statutory double patenting over claim 20 of Malandain. Claim 43 has been amended to recite features not found in claim 20 of Malandain. Applicant respectfully requests that the § 101 statutory double patenting rejection be withdrawn.

Section 102 Rejections

The Examiner rejected claims 1-8, 10-17, 21-23, 26, 31, and 35-36 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,290,288 ("Vignaud"). The Examiner rejected claims 38-42 and 44 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,234,431 ("Keller"). Applicant traverses the rejections.

Claim 1 stands rejected over Vignaud. Claim 1, as amended, is directed to an implantable medical device including a support element and a plurality of anchor assemblies. Each anchor assembly includes a means for locking the anchor assembly to the bottom portion of the support element such that the anchor assembly does not pass through the support element.

The Examiner states that FIG. 3 of Vignaud discloses the medical device of claim 1. Applicant respectfully disagrees. Vignaud discloses a device for osteosynthesis of rachis. In FIG. 3, the device is shown including a plate having a number of apertures, which the Examiner identifies as the claimed support element, and a screw. The screw includes a portion that passes through an aperture in the plate from the bottom. The screw is then anchored to the plate by a clamp and a nut, which holds the screw to the plate from the top of the plate. The Examiner considers the combination of the screw, clamp, and nut as the claimed anchor assembly. *See* col. 1, lines 5-6; col. 2, lines 42-62; FIG. 3.

Claim 1, in contrast, requires a means for locking the anchor assembly to the bottom portion of the support element. Vignaud does not disclose or suggest an anchor assembly that includes a means for locking the anchor assembly to the bottom portion of the support element. Furthermore, claim 1 requires that when the medical device is assembled, the anchor assembly does not pass through the support element. Vignaud, however, passes the screw through one of the apertures in the support element in order to anchor the screw to the support element. Consequently, Vignaud explicitly teaches away from the claimed requirement that Applicant's claimed anchor assembly does not pass through the support element.

Applicant respectfully submits that claim 1, as well as claims 2-37 which depend from claim 1, are in condition for allowance.

Claim 4 stands rejected over Vignaud. Claim 4 is directed to apertures of the support element that provide access to the base and a means for locking the base to the anchor assembly through the top portion of the support element. The Examiner does not identify where Vignaud discloses the features of claim 4. Vignaud does not disclose or suggest the features of claim 4. In Vignaud, the screw is locked into place using a clamp and nut positioned above the plate. Thus, Vignaud does not disclose or suggest apertures that provide access to the base and the means for locking the base to the anchor assembly through the top portion of the support element. Applicant respectfully submits that claim 4 is allowable for at least this additional reason.

Claim 14 stands rejected over Vignaud. Claim 14 is directed to a receiver and anchor assembly that are configured in an interconnecting geometry comprising a T-slot. The Examiner rejected claim 14 but did not identify any portion of Vignaud as disclosing the features of claim 14. Furthermore, Vignaud fails to disclose or suggest any T-slot or configuring an interconnecting geometry comprising a T-slot. Applicant respectfully submits that claim 14 is allowable for at least this additional reason.

Claim 38 stands rejected over Keller. Claim 38 is directed to a method that includes locking anchor assemblies within a support element receiver. The Examiner states that FIG. 5 of Keller discloses the locking of claim 38. Applicant respectfully disagrees.

FIG. 5 of Keller shows a bone plate with a screw passing through an aperture in the bone plate and fixed in position. *See* FIG. 5; col. 1, lines 36-64. The screw is fixed to the bone plate from the top of the bone plate using a nut. *See* col. 4, lines 4-24.

Keller, however, does not disclose or suggest locking a plurality of anchor assemblies within the support element receiver. In Keller, the screw is locked to the bone plate from the top of the bone plate, not within a receiver of the bone plate. Applicant respectfully submits that claim 38, as well as claims 39-42, which depend from claim 38, are in condition for allowance.

Claim 44 stands rejected over Keller. Claim 44, as amended, is directed to a method that includes locking the anchor assemblies within the support element using the second locking means, where the anchor assemblies do not pass through the support element.

As set forth above, Keller discloses locking a screw passing through a bone plate and then attached to the bone plate using a nut. Keller does not disclose or suggest locking the anchor assemblies within the support element where the anchor assemblies do not pass through the support element. Applicant respectfully submits that claim 44 is in condition for allowance.

Allowable Subject Matter

The Examiner has noted that claims 30, 33, 36, and 37 are objectionable as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant

appreciates the Examiner's identification of allowable subject matter in claims 30, 33, 36, and 37.

Conclusion

Applicant respectfully requests that all pending claims be allowed.

By responding in the foregoing remarks only to particular positions taken by the Examiner, Applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, Applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

Please apply the required Petition for Extension of Time fee of \$450 and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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